

# Community & Policy Interventions





## **Community & Policy Interventions: Addressing population-based, policy, community, legal and regulatory interventions in tobacco control**

Over two-dozen studies were identified that have bearing on the development and testing of community and policy interventions. Several studies are focused on collecting information on exposure levels and smoking behavior, which will aid in formulating effective interventions. Most of the research is focused on smoking cessation and prevention of relapse in pregnant women.

### Development and Testing of Interventions to Aid in Quitting Smoking

Research is being conducted on smoking behavior and on interventions to aid in smoking cessation. It is hoped that outcomes from these studies will lead to development of community and policy interventions. The smoking behavior of special populations such as low-income women, college students, various ethnic groups, and incarcerated women is being studied. Collection of information regarding decision-making related to smoking in the home may enable development of laws and regulations that protect children from environmental tobacco smoke in the home and personal vehicles. A study at Columbia University is collecting information about environmental tobacco smoke in African American mothers and newborns in Washington Heights and Harlem. A better understanding of smoking behaviors should lead to better strategies for encouraging smoking cessation. Researchers at the University of Southern California are investigating what can be done to counteract the influences of tobacco marketing on adolescent females. Information from this study may enable health professionals to design more effective tobacco prevention programs. Interventions such as the use of nicotine patches, and education and training by both lay and professional people are being tested for effectiveness. A dietary and activity (including smoking) educational program is being tested by Harvard researchers for potential dissemination through existing community organizations.

### Smoking Cessation in Pregnant Women and Prevention of Relapse Postpartum

A group of ongoing studies are researching methods to reduce smoking in pregnant women. Successful interventions for pregnant women have the potential to decrease pediatric morbidity and mortality. Most of the studies are examining the use of educational programs, mass media-health communication, community organization intervention including social support networks, and professional practice intervention to encourage cessation of smoking in pregnant women. Often the outcomes of various interventions are compared within a single study. A 5-year study is examining the effectiveness of nicotine replacement therapy through use of either gum or a patch to promote prepartum smoking cessation. Information from the study may be used to provide clinical recommendations for integrating nicotine replacement into prenatal care. A reimbursement system that will encourage Medicaid pregnant smokers to quit smoking is being developed by Providence Health Systems in Oregon. A statewide coalition has been formed that will direct the adoption of the system by Oregon managed care organizations. One study is evaluating the efficacy of a voucher-based incentive program for promoting smoking cessation and preventing relapse during pregnancy and postpartum. Another study is testing the use of a Quit and Win contest versus educational literature or telephone counseling. The level of cotinine in the saliva is often used as a practical method for measuring the success of these interventions.

Similarly, several studies are testing interventions to reduce smoking relapse postpartum. Information from telephone interviews and focus groups is being obtained to enable study design. Various types of educational booklets, and telephone counseling or motivational interviewing are being examined as methods to reduce the smoking relapse rate. Columbus Children's Hospital is testing the use of home health visits to prevent smoking relapse and to intervene with mothers who resume smoking within 6 months after delivery. The Sequoia

Foundation is determining tobacco exposure levels for pregnant mothers and their babies from cigarette smoke (passive or active). Information from this study may be used to develop smoking questions that will be used on California birth certificates.

#### Other Related Activities

Several websites, media campaigns, a listserv, and a recent meeting have made or are making contributions toward community and policy interventions. The National Partnership to Help Pregnant Smokers Quit is working with communities and worksites to address the issue of smoking during pregnancy. They are encouraging employers to provide insurance coverage for smoking cessation, and are promoting economic and other policy interventions that will reduce maternal smoking. The American Legacy Foundation is providing a national toll-free Quitline offering pregnant smokers free counseling. The recent Annual Investigator Meeting 2002, sponsored by the California Tobacco-Related Disease Research Program, discussed a variety of topics including tobacco industry marketing aimed at women.

**Title:** Sister to Sister: Helping Low-Income Women Quit Smoking  
**Principal Investigator:** Andrews, Jeannette O.  
**Institution:** University of South Carolina at Columbia, Columbia, SC  
**Funding Agency:** National Institute of Nursing Research  
**Project ID:** NR008065  
**Project Funding Period:** Not available

**Abstract:** Tobacco use is strongly linked to coronary heart disease (CHD), the leading cause of death in women. African American women of lower socioeconomic status are known to have high smoking rates, disparities in smoking related diseases, and difficulty with cessation. Despite these inequities, sparse data exist describing effective interventions targeted to this population. Although not evaluated in African American women, research supports that intensive group tobacco cessation interventions produce the highest quit rates (24 - 48 percent) over self help (7 - 11 percent) and brief interventions (13 - 16 percent) with other populations. Social support and informal extended kin network, particularly with lay health advisors (LHA), are beneficial in targeted behavioral interventions to African American women for other risk reduction measures such as breast cancer screening; however this approach has not been effectively evaluated with tobacco cessation. With further exploration and knowledge, the investigator's goal is to develop and implement a nurse/LHA-managed smoking cessation intervention tentatively entitled, Sister To Sister: Helping Low-Income Women Quit Smoking. The proposed intervention will target mediating variables of social support, self-efficacy, and adaptive coping mechanisms utilizing an intensive group intervention managed by a nurse and LHA. A community advisory group consisting of informal and formal community leaders will be formed to assist with the recruitment and retention of LHAs. Community partnership(s) with businesses, health agencies, churches, and other organizations will provide a representative to the advisory group and resources such as physical space and incentives for LHA. A mid-range theory of self care behaviors in low-income African American women will be developed to provide a framework the study, and Prochaska's Transtheoretical Model of Change will be used to guide the development and implementation of the nurse/LHA intervention.

**Title:** Smoking Cessation in Mothers and Other Household Members of Babies Being Treated in a Special Care Nursery  
**Principal Investigator:** Becker, Bruce  
**Institution:** Rhode Island Hospital, Providence, RI  
**Funding Agency:** Robert Wood Johnson Foundation  
**Project ID:** 040671  
**Project Funding Period:** 1 October 2000 – 30 September 2003

**Abstract:** The major goals of this project are to define the natural history of smoking and smoking cessation for mothers and other household members of babies being treated in the Special Care Nursery and to test a smoking cessation intervention in this milieu.

**Title:** Designing a Provider Incentive System to Increase Adherence to Maternity Tobacco Cessation Guidelines

**Principal Investigator:** Bentz, Charles

**Institution:** Providence Health Systems, Oregon Region, Portland, OR

**Funding Agency:** Robert Wood Johnson Foundation

**Project ID:** 043969

**Project Funding Period:** 1 December 2001 – 30 November 2003

**Abstract:** To significantly increase adherence with the 5 A's Tobacco Cessation guidelines for pregnant smokers in Oregon through development of a comprehensive reimbursement system for obstetrical providers.

Objectives:

Develop a comprehensive reimbursement system for obstetrical providers. Develop a strong implementation strategy for the reimbursement system. Develop the capacity to conduct future systems-level tobacco research by establishing relationships between key Oregon entities engaged in maternity tobacco cessation. This project will significantly advance the state of the art of maternity tobacco cessation within Oregon. Since Providence hospitals have the largest volume of deliveries in Oregon, this reimbursement system applied within Providence has the potential to significantly decrease smoking rates during pregnancy in this state. The collaboration with Care Oregon will potentially extend the reimbursement system to all Medicaid pregnant smokers in Oregon, which could lead to significant reductions in the Medicaid smoking rate. The comprehensive implementation strategy will provide a compelling rationale for managed care organizations (MCOs) to adopt the reimbursement system. The implementation strategy will include a variety of tools to assist MCOs in efficiently implementing the new reimbursement system. Financial modeling is a key component of this strategy, so that MCOs can easily predict the costs of implementing the reimbursement system and can demonstrate the cost-effectiveness of the system in achieving tobacco cessation among pregnant smokers, including avoided negative outcomes for the baby. The implementation strategy will also include recommendations for reducing barriers to provider adherence with 5 A's guidelines, and materials that will aid dissemination once reimbursement is adopted (e.g., suggestions for clinic-based training materials on implementing the 5 A's with pregnant smokers, and information about how to use the new reimbursement billing codes). The statewide coalition developed during this planning project will help direct the adoption of the reimbursement system by Oregon MCOs. A successful working partnership will be established between Providence, Care Oregon, the various Oregon agencies focusing on maternity tobacco cessation (TOFCO and the Oregon Health Division), and Oregon State University tobacco researchers who are currently studying the efficacy of patient incentives in maternity tobacco cessation. This partnership will enhance future research opportunities by creating relationships that encourage collaboration on additional shared research goals beyond the reimbursement system.

**Title:** Preventing Smoking Relapse During Pregnancy and Beyond

**Principal Investigator:** Brandon, Thomas H.

**Institution:** University of South Florida, Tampa, FL

**Funding Agency:** National Cancer Institute

**Project ID:** CA094256

**Project Funding Period:** 1 August 2002 – 31 July 2007

**Abstract:** The prenatal risks of tobacco smoking motivate many women to quit smoking during pregnancy and to maintain abstinence for several months. Unfortunately, the majority of these women relapse to smoking either during their pregnancy or within the first six months postpartum. Resumption of smoking is associated with cancer and other health risks to the smokers themselves and to those exposed to their environmental tobacco smoke, including the infant and other members of the family. Because so many women are able to achieve at least

short-term abstinence during their pregnancy, the pregnancy and postpartum periods are collectively viewed as a "window of opportunity for interventions designed to prevent smoking relapse. Although modest success has been achieved at aiding women in smoking cessation during pregnancy, attempts to prevent subsequent smoking relapse have been unsuccessful to date. The goal of Study I is to develop the key materials for a cost-effective minimal intervention preventing smoking relapse among pregnant/postpartum women. The intervention will be modeled after one developed by the research team that has been found to reduce smoking relapse by approximately two-thirds among a general population of recent quitters. This intervention comprises a series of eight Stay Quit booklets mailed to former smokers over a year. The booklets were developed based on theory and research on smoking relapse, and were found to be extremely cost-effective. However, because pregnant and postpartum women differ in many ways from the general population of ex-smokers, it cannot be assumed that the existing intervention would adequately meet their unique needs. The end product of Study I will be a series of Forever Free for Baby and Me booklets designed to be provided to women between their sixth month of pregnancy and eight months postpartum. The content of the booklets will be based on three sources of information: (1) the existing, validated Stay Quit booklets, (2) theory and research on smoking relapse during and after pregnancy, and (3) systematic formative research comprising focus groups, in-depth interviews, and learner verification interviews. Subjects will include pregnant and postpartum women who have maintained tobacco abstinence, as well as those who have relapsed; their partners; and relevant health professionals in the community. Study II will be a randomized, controlled trial of the intervention developed in Study I. Women who have quit smoking during pregnancy will be recruited via childbirth education classes and randomly assigned to receive the series of Forever Free booklets versus a usual care control condition. Follow up will be conducted through 12 months postpartum, and a format cost-effectiveness analysis will be conducted. If shown to be effective, this minimal intervention would be easy and inexpensive to disseminate to women via a variety of channels and settings.

**Title:** Nursing Smoking Cessation Intervention During Pregnancy

**Principal Investigator:** Bullock, Linda F.

**Institution:** University of Missouri Columbia, Columbia, MO

**Funding Agency:** National Institute of Nursing Research

**Project ID:** NR005313

**Project Funding Period:** 1 August 2001 – 30 April 2005

**Abstract:** Problems related to smoking during pregnancy are entirely preventable. The imminent danger of smoking to mothers (i.e. abruptio placentae) and unborn children (i.e. low birthweight) calls for prompt and intensive intervention. Reasons for continued smoking during pregnancy vary by age and income. In this proposed study's low-income population, the most likely group to smoke throughout pregnancy, women suffer from stressful events in their lives, which they cite as difficult barriers to smoking cessation. Social support has been shown to be beneficial in general for coping with problems. AHCPR smoking guidelines call for a social support component in cessation programs that is delivered by healthcare providers. Unfortunately, the guidelines' recommendations for social support focus narrowly on smoking related problems alone. For low-income pregnant women, this tight focus means healthcare providers may not touch on the very topics that are key to their quitting smoking. Nurses' skills in assessment and providing support are extremely well matched to delivering the help women need to quit smoking during pregnancy. This study's primary aim is to determine whether a combination of an established smoking cessation educational program for pregnant women and a nurse-delivered telephone social support intervention (weekly telephone calls as well as having 24-hour pager access to research nurses) will increase pregnant women's smoking cessation or smoking reduction rates. A sample of pregnant women who smoke will be recruited from WIC clinics in central Missouri. The outcome measure will be saliva cotinine values collected

repeatedly every month from enrollment in the study until the last month of pregnancy. A secondary aim of the study will be to determine the prevalence of relapse among the women who quit smoking, when the relapse occurs, and associated stressors. A randomized controlled trial of four groups will be conducted using a repeated measures 2x2 factorial design with two levels of education (Present or Absent) and two levels of nurse-delivered telephone social support (Present or Absent). To determine significant group differences in quit rates, Chi-square analysis for each month will be used. A fixed-effects repeated measure ANOVA will be used to determine significant group differences in reduction in smoking and survival analysis will detect if there are significant group differences in time to relapse.

**Title:** The Alabama Tobacco Free Families Program

**Principal Investigator:** Crawford, Myra

**Institution:** University of Alabama at Birmingham, Birmingham, AL

**Funding Agency:** National Cancer Institute

**Project ID:** CA86311

**Project Funding Period:** 4 August 2000 – 30 June 2004

**Abstract:** The objective of the Alabama Tobacco Free Families (ATOFF) Program, a multi-component, multi-channel health communications and policy change program, is to reduce the smoking prevalence rate among a representative sample of pregnant females whose maternity care is supported by Medicaid. This will be achieved by reducing the rate of females of childbearing age in eight targeted counties by changes in social norms. The proposed study is an extension of two decades of public health education studies conducted by the University of Alabama at Birmingham (UAB) tobacco research team in partnership with the ADPH's Bureau of Family Health Services (BFHS). ATOFF will expand this partnership to include the ADPH Bureau of Health Promotion and Information. It is designed to enhance the capacity of the state's Tobacco Use Prevention and Control Program (TUPC), funded by CDC in 1999. UAB and ADPH will implement statewide and local partnerships targeting females of childbearing age to be tobacco-free prior to and during pregnancy. ATOFF will be evaluated using a time series design and analysis with multiple, quarterly baseline and follow-up measures of prevalence across the eight targeted counties. Process and behavioral impact evaluations will be conducted. The four specific aims to be accomplished by the proposed study will be to 1.) Identify and select a representative sample of patients from a randomly selected sample of Medicaid-supported maternity care sites to serve as the ATOFF clinic population, and to recruit a representative sample of females (14-44) to participate in a telephone-based survey to serve as the ATOFF community cohort; 2.) Develop and implement a multi-component, multi-channel program focused on females of childbearing age and their families in eight target counties and consisting of (a) a mass media-health communications component, (b) a community organization component, and (c) a professional practice component; 3.) Document the implementation success (process evaluation) of the media messages and community initiatives to change beliefs, behaviors, and social norms related to tobacco use among the samples of females in Aim number 1 by conducting clinical and community assessments in Years 01, 02, 03 and 04; and 4 Document, be self-reports and saliva cotinine tests, the effectiveness (impact evaluation) of ATOFF's program to reduce the prevalence among the clinic population at entry (first visit) into Medicaid maternity care, and by self-report via telephone of the females in the community population.

**Title:** Smoking Research with Incarcerated Females  
**Principal Investigator:** Cropsey, Karen L.  
**Institution:** Virginia Commonwealth University, Richmond, VA  
**Funding Agency:** National Institute on Drug Abuse  
**Project ID:** DA015774  
**Project Funding Period:** 30 September 2002 – 31 August 2007

**Abstract:** The purpose of this application for a 5-year Mentored Patient-Oriented Research Career Development Award (K23) on smoking among incarcerated females is to conduct research and training activities to advance the candidate's development as an independent clinical researcher. This includes formal classwork pertaining to research design, biostatistics, and ethics along with conference attendance and meetings with mentors. The proposed research plan includes two studies that build upon each other in the area of smoking among female prisoners. The first study is cross-sectional and is designed to investigate the smoking behavior of incarcerated females. In addition, this study will examine differences between smokers, ex-smokers, and non-smokers on measures of substance abuse and personality, with consideration to other key covariables such as criminal history, medical problems, readiness to change, and Axis I pathology as possibly differentiating between the three groups. The second study will be a clinical trial using Hall et al. 's (1994) Mood Management group smoking cessation intervention combined with nicotine patch (or no patch). The intervention group will be compared to a wait-list control group who will receive the treatment six months later. It is expected that women who successfully complete the intervention will have higher smoking cessation rates than wait-list controls. Further, it is hypothesized that women with substance abuse and psychiatric comorbidity will have poorer outcomes than those without comorbidity. These projects should add significant information to the literature which is currently devoid of research related to smoking and female prisoners. This is particularly relevant now as it has been shown that women may have more difficulty with quitting smoking than men and may also have additional concerns related to smoking (e.g., smoking as weight management) that influence their success. Testing effective smoking cessation interventions with this underserved and understudied population is urgently needed as the medical costs associated with treating prisoners currently accounts for 11% of the Department of Corrections' budget and is expected to double over the next 10 years. Overall, these projects will provide experiences necessary for the candidate to develop an independent research program focusing on effective smoking interventions for incarcerated individuals.

**Title:** Efficacy of Motivational Enhancement and Physiologic for Prenatal Smoking Cessation  
**Principal Investigator:** Groff, Janet  
**Institution:** Not available  
**Funding Agency:** Robert Wood Johnson Foundation  
**Project ID:** Not available  
**Project Funding Period:** Not available

**Abstract:** Not available

**Title:** Staying Smoke Free: A Role for Visiting Nurses in Preventing Postpartum Relapse  
**Principal Investigator:** Groner, Judith  
**Institution:** Columbus Children's Hospital, Columbus, OH  
**Funding Agency:** Robert Wood Johnson Foundation  
**Project ID:** 040678  
**Project Funding Period:** October 2000 – September 2002

**Abstract:** To refine and pilot an intervention incorporated into home health visits to new

mothers who quit smoking during pregnancy, to prevent relapse to smoking and quickly intervene with mothers who resume smoking within 6 months after delivery.

**Research Design:** Quasi-experimental with non-concurrent, non-randomized samples. The smoking relapse rate of the intervention group will be compared with baseline relapse rate of a natural history sample established prior to the intervention.

**Study Population:** Women who quit smoking during pregnancy, and who remain smoke free for at least 7 days prior to delivery. The population will be enrolled at the Ohio State University Hospital Post-Partum Service.

**Intervention (if appropriate):** The intervention has four components over time, and is based on cognitive-behavioral theory. The components occur at the following times: at the postpartum recruitment contact (Component 1), first home visiting Nurse contact within 1 week of delivery, (Component 2), within 1 month of delivery, by home visit or telephone call (Component 3), and within 3 months after delivery by home visit or by telephone call (Component 4). Home visits or phone calls will be determined by the usual Home Visiting Nurse criteria -- if mother/infant dyad warrants home visits 3 or 4, then intervention will occur at that visit; if they don't require home visits, then intervention will occur by phone from the Home Health Nurse.

**Outcome Measures (If cessation or reduction, how defined):** Maintenance of smoke-free status will be measured at 3 and 6 months post intervention. Maintenance is defined as self-report of not resuming smoking since quit date during pregnancy. Participants who report not resuming smoking will have their saliva tested for cotinine to confirm recent smoke-free status. The other main outcome measure is the cost of the intervention, to be measured by personnel time in successfully completing the intervention.

**Title:** Voucher-Based Incentives to Treat Pregnant Smokers

**Principal Investigator:** Higgins, Stephen T.

**Institution:** University of Vermont & State Agricultural College, Burlington, VT

**Funding Agency:** National Institute on Drug Abuse

**Project ID:** DA014028

**Project Funding Period:** 30 April 2001 – 31 March 2006

**Abstract:** Maternal cigarette smoking is the most important preventable cause of poor pregnancy outcomes in the U.S. and a leading cause of pediatric morbidity and mortality. Approximately 30% of women in the U.S. are cigarette smokers when they become pregnant and the prevalence is greater still among less educated women. About 80% of these women smoke throughout their pregnancy. Even among those who quit, 25-30% relapse during the pregnancy and 70% within 6 months of delivery. Efficacious interventions have been developed for promoting smoking cessation during pregnancy, but cessation rates are low, especially among low-income and highly nicotine-dependent women (< 15%). Efficacious interventions to prevent relapse during the postpartum period remain to be developed. We propose to examine the efficacy of a voucher-based incentive program for promoting smoking cessation and preventing relapse during pregnancy and postpartum. This incentive program is efficacious in promoting and sustaining abstinence in cocaine and other illicit drug abusers. A recent trial suggested that vouchers may be efficacious for increasing smoking cessation among pregnant smokers. The proposed studies are designed to rigorously evaluate the efficacy of voucher-based incentives for promoting cessation and extend them to preventing relapse among pregnant women and new mothers. Two randomized trials are proposed. First, we will examine the efficacy of vouchers delivered contingent on smoking abstinence for increasing cessation rates during pregnancy and postpartum among 226 women who are still smoking at their first prenatal visit. Second, we will examine the efficacy of contingent vouchers for preventing relapse during pregnancy and

postpartum among 96 women who have already quit smoking prior to the first prenatal visit. Women for both trials will be recruited from Vermont's largest obstetrical practice, which serves a large population of uninsured, low-income women. In both trials, the voucher-based intervention will be added to brief smoking advice delivered by physicians/midwives and compared against control conditions wherein brief advice is combined with vouchers delivered independent of smoking status. Overall, the proposed studies have the potential to contribute important new scientific and practical information on effective treatment for one of our nation's most daunting drug abuse problems.

**Title:** Ascertainment of Environmental Tobacco Exposure in Pregnancy

**Principal Investigator:** Kharrazi, Martin

**Institution:** Sequoia Foundation, Berkeley, CA

**Funding Agency:** California Tobacco-Related Disease Research Program

**Project ID:** 8RT-0115

**Project Funding Period:** 1 July 1999 – 30 June 2002

**Abstract:** Even though it is well-known that the health of pregnant women and their newborn offspring is damaged by tobacco smoke, little is known about who in California is exposed to tobacco smoke during pregnancy, for how long and how much. One reason for this is that California is the only state that does not have a smoking question as part of its birth certificate. The objectives of this research project are to put together a source of information to answer these and other questions about smoking. We will work together with other programs of the California Department of Health Services, the National Centers for Disease Control and Prevention (CDC), the San Diego County Health Department, 20 delivery hospitals, area medical laboratories, and numerous community clinics and doctors to do this. We will collect information from pregnant women in San Diego County during 1999-2001. Blood and urine taken from pregnant women for non-study reasons and which is left over after analysis will be collected by the study, stored and later used to measure how much tobacco smoke these women were exposed to. We will obtain the blood and urine at three points in the pregnancy: at the time each woman goes in for a pregnancy test at a lab or doctors' office, at 15-19 weeks gestation when she gives blood to be screened for certain birth defects, and at birth when umbilical cord blood is taken at the hospital. While at the hospital for delivery, the mother will be asked to answer a short questionnaire (in Spanish or English) about her smoking history and her exposure to others who were smoking during the pregnancy. Participation in the study is voluntary and necessary approvals from women will be obtained for all collection activities. Over a 19-month period, we plan to collect approximately 40,000 maternal urine or serum samples collected early in pregnancy, 60,000 maternal serum samples collected in the second trimester, and 50,000 umbilical cord blood samples, live birth records and questionnaires collected at the time of the birth. Approximately 6,000 blood and urine samples from over 2,000 women will be selected and sent to a special national lab for analysis. Levels of a tobacco metabolite (cotinine) in a woman's blood or urine will be measured to find out how much tobacco she and her baby were exposed to, either by smoking or by being around others who smoke. Once all of these data are linked together, we will be able to: 1) define the true pattern of tobacco smoke exposure across the nine months of pregnancy; 2) determine the characteristics of women who are most exposed to tobacco smoke; and 3) determine which of two smoking questions women most accurately respond to. If we can scientifically validate at least one of the smoking questions, then it will be recommended for use on future California birth certificates. The results of this study will be helpful in informing future research efforts as well as in shaping policies to prevent the health of pregnant women and their newborns from being damaged by tobacco smoke.

**Title:** Smoking Cessation Program for Low Income Pregnant Women  
**Principal Investigator:** Lasater, Thomas M.  
**Institution:** Brown University, Providence, RI  
**Funding Agency:** National Heart, Lung, and Blood Institute  
**Project ID:** HL057457  
**Project Funding Period:** 30 September 1997 – 31 July 2003

**Abstract:** This project is a collaborative effort of physicians with experience in providing prenatal care to low income participants and researchers who have developed and refined three different program components to reduce cigarette smoking. The design is a prospective randomized pretest/posttest design with biochemically confirmed smoking status as the outcome. Posttests will be carried out at 37 weeks of gestation, six weeks postpartum and six months postpartum. Participants will be randomized to three groups. Group 1 will use an adapted version of a Quit Kit called "A Pregnant Woman's Guide to Quit Smoking" developed by Dr. Richard Windsor; Group 2 adds a Quit and Win contest used by the Principal Investigator; and Group 3 adds the use of telephone counseling based upon motivational interviewing. These materials will be made culturally appropriate for African-Americans and Hispanics.

**Title:** Female Drug Abuse Science Curriculum  
**Principal Investigator:** Leukefeld, Carl G.  
**Institution:** University of Kentucky, Lexington, KY  
**Funding Agency:** National Institute on Drug Abuse  
**Project ID:** DA011388  
**Project Funding Period:** 30 September 1998 – 31 August 2002

**Abstract:** Attracting young people into scientific careers in drug abuse, is a goal of the National Institute on Drug Abuse (NIDA, 1993). The under representation of females in the scientific community underscores the need to encourage more females to pursue scientific careers (Yentsch & Sinderman, 1992), and in drug abuse research (NIDA, 1993). Based upon involvement with research projects in rural areas, and experiences with Appalachian youth, there is modest interest in scientific careers among these youth, and most frequently no knowledge of, or interest in, drug abuse research among females. The overall aim of this revised project is to develop, implement, and refine a curriculum manual -- Female Drug Abuse Science Curriculum (F-DASC) -- which targets Appalachian high school females to increase their scientific, technological, and interpersonal skills in order to facilitate their entry into drug abuse research. The specific aims for this project are: (1) To develop and implement the curriculum to increase the scientific, technological, and interpersonal skills of Appalachian high school females in the area of drug abuse research; (2) To provide female scientific mentors and community mentors to serve as role models; (3) To increase the scientific, technological, and interpersonal skills of Appalachian women in order to enhance their awareness of, interest in, and likelihood of entering scientific careers in the areas of drug abuse research; and (4) To refine the curriculum and develop a manual for replication. Fifty young women will participate in the intensive three year F-DASC experience. Scientific and community mentoring on-going throughout each year is coupled with a four week campus summer curriculum. The approach, based on the literature and the experience of the University of Kentucky Center for Science and Health Careers makes science exciting and offers rewards to maintain interest in research with increased skills to pursue careers in drug abuse research.

**Title:** Testing Pharmacological Therapies for Pregnant Smokers  
**Principal Investigator:** McBride, Colleen  
**Institution:** Duke University, Durham, NC  
**Funding Agency:** National Cancer Institute  
**Project ID:** CA089053  
**Project Funding Period:** 1 May 2002 – 30 April 2007

**Abstract:** Smoking in pregnancy poses serious health risks to the fetus and the mother. About half of women smokers continue to smoke throughout pregnancy. Pregnant women who have the greatest difficulty quitting smoking even when provided with behavioral cessation interventions tend to be more dependent smokers who may require nicotine replacement therapy to be successful at cessation. The proposed five-year study is designed to evaluate the effectiveness of providing over-the-counter (OTC) nicotine replacement therapy, choice of gum or patch, (NRT) to promote prepartum smoking cessation. Proposed is a two-arm design. Eligible pregnant women (N=300) will be randomized to either: Arm 1, Tailored Cognitive Behavioral Treatment (TCBT, n=150) that provides women with customized risk information about smoking and nicotine, the potential harms to the fetus and encouragement of appropriate behavioral skills building; or Arm 2, TCBT + NRT - the tailored intervention incorporating NRT information plus choice of patch or gum (n about 150). The intervention will include 5 face-to-face contacts as part of prenatal visits and 2 telephone counseling sessions. Primary outcome measures will be biochemically validated 7-day prevalent abstinence rates at the 19-27th and 27-35th week of pregnancy. Secondary outcomes will include 7-day prevalent abstinence rates at 12 and 24 weeks postpartum, serious quit attempts, compliance with NRT, and use of materials. Saliva cotinine will be measured among all women at baseline, the 27-35th week of pregnancy, and 24 weeks postpartum. The significance of this project is that it relies on transdisciplinary collaborations to extend the science in nicotine replacement therapies to a population that could derive substantial health benefits. Moreover, the study results have immediate potential to inform clinical recommendations for integrating nicotine replacement into prenatal care.

**Title:** Mapping the Natural History of Smoking and Smoking Cessation Among Pregnant Women  
**Principal Investigator:** Muramoto, Myra  
**Institution:** The University of Arizona, College of Medicine, AZ  
**Funding Agency:** Robert Wood Johnson Foundation  
**Project ID:** 040672  
**Project Funding Period:** 1 October 2000 – 30 September 2003

**Abstract:** Purpose: (1) To document the natural history of smoking cessation and relapse as a dynamic process influenced by differing sets of variables over time and in response to life transitions or events, e.g. delivery, motherhood, stress, depression. (2) To examine the harm reduction goals, strategies, and practices of pregnant and postpartum women who reduce their smoking intensity but not quit, and how this changes over time. (3) To gain a better understanding of how social support networks affect a woman's ability to quit or reduce smoking during pregnancy and postpartum, with a particular focus on the extent to which patient characteristics such as age, ethnicity, gravity and parity, and breastfeeding status influence provider attitudes and characteristics. (4) To document the cessation treatment practices of prenatal and maternal child health providers.

**Research Design:** A longitudinal ethnographic study of smoking and quitting behavior among pregnant/postpartum women who currently smoke or have quit during pregnancy. The study will apply both qualitative and quantitative methods. Subjects will be interviewed a total of nine times from the time of the study entry until six months postpartum. Each pregnant woman will

be interviewed three times prior to delivery and monthly for six months postpartum. Prepartum interviews will be in-person and postpartum interviews will consist of three in-person interviews and three telephone interviews. At the completion of the interviews, some subjects will participate in focus group sessions. In addition, this study will conduct focus groups with prenatal and maternal child health care practitioners.

**Study Population:** Sixty low-income pregnant women from WIC clinics in Tucson and in Pima, Pinal and Santa Cruz counties will be enrolled. Forty of the sixty women enrolled will be Caucasians and twenty will be Hispanics. A second target population (for focus groups) is prenatal and maternal child healthcare providers.

**Outcome Measures:** Self reported abstinence will be verified by salivary cotinine.

**Title:** Health Effects of PAH & ETS in Minority Women & Newborns

**Principal Investigator:** Perera, Frederica P.

**Institution:** Columbia University Health Sciences OGC, New York, NY

**Funding Agency:** National Institute of Environmental Health Sciences

**Project ID:** ES008977

**Project Funding Period:** 1 August 1997 – 31 July 2002

**Abstract:** There is increasing evidence that people of color are disproportionately exposed to numerous environmental hazards, including hazardous air pollutants such as polycyclic aromatic hydrocarbons (PAH) and environmental tobacco smoke (ETS). The Washington Heights and Harlem neighborhoods in Manhattan are typical of other Hispanic and African American communities in that they are located in a large sprawling metropolitan area characterized by elevated air pollution. The incidence of low birth weight is higher among African Americans living in Central Harlem and Hispanics living in Washington Heights than in Caucasians in the U.S. Cancer rates are also higher in African Americans than in Caucasians. Environmental risks to the developing infant are of particular concern, given the likelihood of increased susceptibility during this period. A molecular epidemiologic cohort study of African American and Hispanic mothers and newborns is proposed to investigate the role of PAH and ETS in procarcinogenic and developmental damage. A combination of personal monitoring, questionnaire and biomarkers in peripheral blood will be used to quantify individual exposure to the toxicants of concern. The biomarkers include PAH-DNA adducts in white blood cells (an indicator of PAH exposure and procarcinogenic genetic damage) and plasma cotinine (a metabolite of nicotine and internal dosimeter of ETS). Measures of development will be assessed in the infants at birth and at 6 and 12 months. The proposal is responsive to concerns about environmental justice and to the recommendation of the National Research Council that risk assessment and public health policy pay special attention to the protection of young infants and children.

**Title:** Reducing Disease Risk in Low Income Postpartum Women

**Principal Investigator:** Peterson, Karen

**Institution:** Harvard University, Boston, MA

**Funding Agency:** National Institute of Child Health and Human Development

**Project ID:** HD37368

**Project Funding Period:** 1 September 1999 – 30 June 2003

**Abstract:** The postpartum period is a window of opportunity to promote behaviors to reduce risk of chronic disease and benefit reproductive health, through interventions that address multiple levels of influence in the social context of low-income women. This study will test the efficacy of an education model delivered by community-based paraprofessionals from the

Expanded Food and Nutrition Program (EFNEP). This educational program aims to improve dietary and activity patterns among low income, multi-ethnic women over a 12-mo postpartum period, followed by a 6-mo maintenance period. Women will be recruited through the Special Supplemental Food Program for Women, Infants, and Children (WIC) and randomized to 1) Usual WIC Care, consisting of nutrition-risk appropriate and breastfeeding educational messages at the first postpartum and follow-up visits; 2) Enhanced EFNEP, consisting of Usual WIC Care plus a three-component intervention including 4 home visits and 4 group cooking and activity classes delivered by EFNEP paraprofessionals, and monthly motivational telephone calls made by project staff. During a 6-mo maintenance period, staff will make calls bi-monthly. Primary study Outcomes assessed at 4 time points (2-6 wk and 6, 12, 18 mo postpartum) include: a) fruit and vegetable intake; b) saturated fat intake; c) physical activity; secondary outcomes are Body Mass Index and indicators of fat mass and distribution. Statistical analysis will include explorations of mediating and modifying factors including social support and norms, perceived health status, smoking, television viewing, food insecurity, food/activity access, and utilization of federal programs and health care. Using existing federal programs for low income families as channels, intervention components specifically address influences that mediate adoption of healthy diet and activity behaviors among multi-ethnic, postpartum women. If efficacious, this program can be readily disseminated through the existing community organizations in which it is being tested.

**Title:** Motivational Intervention for Pregnant Women Who Continue to Smoke After Receipt of Best Practice Cessation Services

**Principal Investigator:** Quinn, Virginia

**Institution:** Kaiser Foundation Research Institute, Oakland CA

**Funding Agency:** Robert Wood Johnson Foundation

**Project ID:** 040539

**Project Funding Period:** 1 October 2000 – 30 September 2003

**Abstract:** Purpose: To develop and test a brief, multi-component, motivational intervention for delivery by ultrasound technicians to smokers presenting for their routine mid-pregnancy ultrasound.

Research Design: The proposed intervention will be tested using a historical usual care control group design. The control group will be impaneled in the first 7 months of recruitment. The intervention group will be impaneled in the 7 months following implementation of the cessation program. Data from baseline and postpartum interviews will be used to adjust for confounding influences and to identify the predictors of cessation.

Study Population: 284 adult pregnant smokers will be recruited from the diverse membership of a large multi-specialty group model HMO.

Intervention (if appropriate): The intervention consists of 10 to 15 minutes of counseling and written materials tailored to smokers' stage of change and characteristics that put them at risk for continued smoking. Additionally, women will receive smoking-related health messages when presented with an ultrasound scan of their developing fetus. The intervention will be structured by the principles and techniques of motivational interviewing and provide cognitive/behavioral strategies for cessation. It will include previously identified elements of effective brief interventions.

Outcome Measures (If cessation or reduction, how defined): The primary dependent variable is biochemically confirmed abstinence in the 8th month of pregnancy.

**Title:** Motivational Interviewing to Prevent Postpartum Relapse  
**Principal Investigator:** Quinn, Virginia  
**Institution:** Kaiser Foundation Research Institute, Oakland, CA  
**Funding Agency:** California Tobacco-Related Disease Research Program  
**Project ID:** 6KT-0206  
**Project Funding Period:** 1 July 1997 – 30 June 2001

**Abstract:** The goal of this study is to develop and test an innovative relapse prevention program for women who stop smoking during pregnancy. Pregnancy offers women one of the best opportunities to stop smoking. Nearly half of the women who were smoking prior to pregnancy take advantage of this time of change and quit smoking, mainly to protect the health of their unborn child. Unfortunately, rates of relapse after delivery are high with as many as 70% of the quitters returning to smoking within 6 months of delivery.

Cigarette smoking is associated with many serious illnesses, especially those related to heart and lung disease. Although smoking carries additional risks for women of reproductive age, more than 25% of US women between the ages of 18 and 44 continue to smoke. Postpartum relapse re-exposes women to the health dangers of smoking. Further harm is done by exposing infants and children to passive smoke. Numerous studies have documented increased rates of respiratory infections, including pneumonia, bronchitis, and ear infections. More recently, passive smoke has been implicated in Sudden Infant Death Syndrome.

To develop an effective program we will adapt the principles and techniques of motivational interviewing to the context of postpartum relapse. Motivational interviewing is a supportive, non-judgmental counseling style that appears to be especially useful with behaviors that are difficult to change. It helps clients weigh the benefits and costs of their behaviors. The counseling will be delivered over the telephone by trained health educators in 4 to 6 brief calls. The literature identifies the influence of powerful barriers to maintenance such as being around other smokers, having a partner who smokes, and lack of confidence in the ability to stay off cigarettes. Counselors will help women identify their personal threats to maintenance, including lack of motivation to stay off cigarettes, and will assist women in developing effective coping strategies. The content of the program will be developed from telephone interviews and focus groups conducted among white, black, and Latino women who quit smoking during pregnancy. Subjects will be recruited from the diverse population of Southern California Kaiser Permanente. The effectiveness of the motivational interviewing program will be measured by comparing the bio-chemically confirmed 6-month postpartum abstinence rates among women who received the counseling program and women who did not. An effective postpartum relapse prevention program would make a significant contribution to the health of young women, their newborn infants, and other family members.

**Title:** Prenatal Smoking Cessation Relapse Prevention Trial  
**Principal Investigator:** Quinn, Virginia  
**Institution:** Kaiser Foundation Research Institute, Oakland, CA  
**Funding Agency:** National Institute of Child Health and Human Development  
**Project ID:** HD036719  
**Project Funding Period:** 1 May 1999 – 30 April 2003

**Abstract:** Smoking during pregnancy exerts an independent, adverse effect upon numerous reproductive outcomes, and thus the reduction in the prevalence of prenatal smoking has been a national priority for the past decade. Approximately a quarter of US women smoke prior to becoming pregnant, with a third of these smokers quitting prior to the start of prenatal care - and are referred to as Spontaneous Quitters (SQs). Several studies have documented that at least 25 percent of SQs relapse prior to delivery, and therefore the health of the mother and fetus is once

again jeopardized due to tobacco exposure during pregnancy. To date, randomized trials testing various interventions have failed to reduce prenatal relapse with this group. This study proposes to develop a telephone counseling relapse prevention program based on the principles of motivational interviewing to address the needs of this unique group of recent quitters. The theoretically-grounded program will be developed during a formative assessment period consisting of in-depth interviews and focus groups with a representative sample of SQs. The effectiveness of the intervention will be tested under conditions of typical clinical practice among a diverse population of prenatal patients who are members of a large HMO (Southern California Kaiser- Permanente). A total of 480 SQs will be randomly assigned to either a) usual care -- consisting of provider advice which may be offered during prenatal visits and a self-help smoking cessation/maintenance booklet; or b) usual care + the experimental telephone-based counseling intervention. The principal dependent variable will be biochemically confirmed maintenance of cessation for the duration of pregnancy. If effective, the proposed intervention offers the opportunity to decrease the prevalence of prenatal smoking among the approximate 1 million US women who annually initiate prenatal care as prepregnancy smokers. Finally, as more than 75 percent of the women who stop smoking during pregnancy are SQs and given the high rate of postpartum relapse, learning about successful maintenance during pregnancy may aid intervention efforts to prevent the return to smoking after delivery.

**Title:** Telephone Counseling Program for Pregnant Smokers Enrolled in a Managed Care Organization

**Principal Investigator:** Rigotti, Nancy A.]

**Institution:** Massachusetts General Hospital, Institute for Health Policy, Boston, MA

**Funding Agency:** Robert Wood Johnson Foundation

**Project ID:** 040667

**Project Funding Period:** October 2000 – September 2004

**Abstract:** The purpose of this study is to test whether offering pregnant smokers a proactive telephone counseling program throughout pregnancy and for 2 months postpartum increases the rate of smoking cessation and of tobacco use reduction, at end of pregnancy and 3 months postpartum, compared to a "best practice" control.

**Research Design:** This study is a randomized controlled clinical trial to compare the effectiveness of an enhanced version of an existent smoking cessation telephone counseling program for pregnant women with a "best practice" control.

**Study Population:** The study population is pregnant women smokers enrolled in the Tufts Health Plan. The goal is to recruit 434 women over a 29-month enrollment period. Eligibility criteria include (1) being in the 1st or 2nd trimester of pregnancy, (2) having smoked >1 cigarette in the past week, (3) having access to a telephone and (4) the ability to speak English.

**Intervention (if appropriate):** The intervention condition will include:

- 1) A mailed pregnancy-tailored manual; 2) Proactive, stage-based telephone counseling by a trained smoking counselor on a standardized schedule for the remainder of pregnancy (an initial 15-20 minute call and up to 6 subsequent 10-15 minute calls). Counseling will incorporate motivational enhancement, skills training, problem-solving, and relapse-prevention strategies; 3) Mailings sent to the obstetrical provider (informing him/her of the patient's participation and reminding provider to advise nonsmoking at each visit). Chart stickers and self-help materials will also be provided. After delivery, similar letters will be sent to the obstetrician and the infant's pediatrician; 4) Stop-smoking advice from the obstetric provider.

Outcome Measures (If cessation or reduction, how defined): Smoking cessation at the end of pregnancy is the primary outcome. Smoking status outcomes will be assessed by telephone at the end of pregnancy (28-34 weeks) and 3 months postpartum. Saliva samples will be collected from self-reported nonsmokers at each follow-up point to verify nonsmoking status. Self-reported nonsmoking will be considered validated if saliva cotinine value is <20 ng/ml. Secondary outcome measures will include participant's health care utilization and costs (including those incurred during pregnancy and by the infant during months 0-3), which will be obtained from Tufts HP claims data. Intermediate outcomes will include number of quit attempts (defined as >24 hours of self-reported abstinence) and stage of readiness to quit smoking.

**Title:** Reducing Environmental Tobacco Smoke Exposure in Private Places: A Qualitative Study of Postpartum Women, Partners, and Tobacco Control Advocates

**Principal Investigator:** Stewart, Donna

**Institution:** University of Health Network, Toronto, CA

**Funding Agency:** National Cancer Institute of Canada

**Project ID:** Not available

**Project Funding Period:** 1 August 2001 – 1 August 2003

**Abstract:** Tobacco control in home environments has become a politically charged topic. Opponents raise issues related to individual rights, freedoms and choices. Supporters argue, however, that regulations to protect children from environmental tobacco smoke (ETS) in the home does not differ substantially from laws and regulations that protect children from domestic physical and sexual abuse or that mandate the use of seat belts in motor vehicles. This research project involves an in-depth study of household decision-making and negotiation in the matter of smoking arrangements. It will also examine efforts made by postpartum women and their partners to reduce infant exposure to ETS in their homes and personal vehicles. The research will also seek to understand which of the partners has greater power to influence change and to reconcile the paradox of smoking (a harmful, selfish behaviour) and parenthood (a loving, altruistic relationship).

**Title:** Smoking Among LSU and SU Undergraduates: Causes and Elimination

**Principal Investigator:** Sylvester, Judith

**Institution:** Louisiana State University, Baton Rouge, Baton Rouge, LA

**Funding Agency:** Louisiana Health Excellence Fund

**Project ID:** Not available

**Project Funding Period:** June 2000 – May 2004

**Abstract:** This project will identify LSU/SU college students who smoke to determine why they smoke and what types of information and support will be necessary to help them to quit. Female smokers, who are putting their children at risk if they smoke during pregnancy, will be the main focus of these efforts. A second target will be minority students.

In 1996, the PI conducted a survey, based on a random sample of 400 LSU students, that found 30% of students smoke. Nearly a quarter of the females smoked. Sixty-five percent of the smokers said they had unsuccessfully tried to quit. This study will use a social marketing approach that first requires segmenting students into groups based on attitudes and behaviors.

This study will employ focus groups and Q methodology (factor analyzing subjects who sort a number of self-referent statements) to better describe smoking behaviors and explore possible strategies and support methods for students who wish to quit or reduce their amount of smoking.

Specific messages will be developed that target the segments identified in the first phase of the research. The best channels (media, support groups, posters, etc) for delivering the messages to the targeted segments will then be determined.

Finally, an evaluation of message salience and effect on behavior will be conducted. These findings can then be provided to other state centers that can then use this information to mount a large-scale campaign to reduce smoking behaviors among college students in Louisiana and at other campuses across the country.

**Title:** The Domestication of Addiction: The Marketing of Tobacco Products to Women in North America 1920-1950

**Principal Investigator:** Warsh, Cheryl

**Institution:** Malaspina University College, Nanaimo, BC

**Funding Agency:** National Cancer Institute of Canada

**Project ID:** Not available

**Project Funding Period:** 1 August 2000 – 31 July 2003

**Abstract:** This project is an investigation of the relationship between the construction of gender in mass culture and the increased use by women of tobacco products in the 20th century. Because smoking traditionally has been a male preserve, the social acceptance of cigarettes as products for female use, or domestication, was a not inconsequential shift in mores. This shift would begin to take place in the 1920s, during a period in the United States and most Canadian provinces of prohibitory legislation regarding beverage alcohol, another controversial substance. The timing demonstrated that the forces of the mass market were beginning their ascendancy over the influences of religion and reform. Through their exposure to advertising, marketing strategies, films and popular magazines, American and Canadian women were persuaded that smoking was normal and even a chic activity to pursue.

I will be examining advertisements in popular magazines from the 1920s to the 1950s (by which time the marketing victory was complete) to determine shifts in their depiction of women and men. Depictions of both genders in the act of smoking will of course be noted, but not exclusively. Favorable or idealistic lifestyles or behaviour depicted in tobacco advertisements which would be associated positively by the readers with the products also will be analyzed. While such lifestyle advertising has been investigated over the last 30 years, there is more work to be done on the earlier and pivotal period.

I also will be looking at the strategies, techniques, and goals of a variety of marketing campaigns, through the examination of the papers of Edward Bernays, one of America's foremost public relations agents. Bernays is perhaps best known for his marketing strategies to promote cigarette smoking among women in the 1920s. In his memoirs, he emphasized his personal influence, albeit regretfully. Even accounting for self-aggrandizement, Bernays's influence was considerable, particularly in linking cigarette smoking with women's liberation, sophistication and modernity. With respect to Canada, I will be focusing upon the centre of the tobacco industry, Montreal, by examining the extant records of Imperial Tobacco and MacDonald Tobacco, trade journals, newspapers and government documents to determine the marketing strategies and techniques of the major Canadian manufacturers and their influences upon the host community.

**Title:** Smoking Cessation/Reduction In Pregnancy Trial (SCRIPT)  
**Principal Investigator:** Woodby, Lisa  
**Institution:** University of Alabama at Birmingham, Birmingham, AL  
**Funding Agency:** National Heart, Lung, and Blood Institute  
**Funding ID:** HL056010  
**Project Funding Period:** 1 January 1997 – 31 December 2002

**Abstract:** Smoking among pregnant women, particularly public health maternity patients, is one of the most important risk factors in predicting infant and maternal morbidity and mortality. Smoking among pregnant women has been a national priority for our 1990 and Year 2000 health objectives. The objective of the proposed study-- Smoking Cessation and Reduction In Pregnancy Trial (SCRIPT) -- is to evaluate the EFFECTIVENESS of a smoking cessation intervention for pregnant smokers delivered as part of routine care by public health nurses in Alabama. Four aims will be completed 1) To randomly select a representative sample of public health maternity clinics and Medicaid-supported obstetrical care patients in Alabama; 2) To conduct, among patients and staff at Aim #1 sites, a three-phase formative evaluation of a multi-component smoking cessation and reduction intervention, including a patient education, counseling, skills training program for nursing staff; 3) To evaluate the behavioral impact of the multi-component health education intervention program among at least 2000 pregnant smokers, 1000+ randomly assigned to an Experimental (E) Group and 1000+ randomly assigned to a Control (C) Group at their first prenatal visit; and, 4) To conduct a process evaluation to document the degree of patient exposure to the intervention methods and evaluation procedures specified in Aim #3. SCRIPT will confirm the EFFECTIVENESS RATES AND EXTERNAL VALIDITY of the intervention. Very limited insight is available in the Public Health Practice literature about these two outcomes.

**Title:** Media and Smoking Among Adolescent Girls Across Ethnicity  
**Principal Investigator:** Yang, Dongyun  
**Institution:** University of Southern California, Los Angeles, CA  
**Funding Agency:** California Tobacco-Related Disease Research Program  
**Project ID:** 8DT-0175  
**Project Funding Period:** 1 January 2000 – 30 June 2002

**Abstract:** Smoking prevalence among adolescents has been increasing since the early 1990s in the United States and California. In California, more teenage girls reported smoking cigarettes in the past 30 days in 1996 than in 1990. More African-American, Hispanic and Asian female teenagers reported interest in trying a cigarette than their White counterparts. Tobacco advertising and promotion items appear to attract adolescents, especially girls who smoke to look "cool", to be mature, or to keep their weight down. Most current tobacco prevention programs are universal and do not consider the diverse cultural backgrounds of the targeted population. However, tobacco industry has employed ethnically specific marketing campaigns to attract young and/or female customers. More efforts are needed to improve the effectiveness of the current tobacco prevention programs by adding gender specific and culturally appropriate curricula. This project intends to study cigarette smoking behavior and media exposure among African-American, Asian, Hispanic, and White female teenagers. The proposed study also plans to investigate which ethnic groups are more vulnerable to tobacco advertising and promotion influences, and to determine whether the impact of tobacco marketing on female adolescent smoking differs across ethnicity among female teenagers. This study could provide better understanding of the relationship between media exposure and cigarette smoking among teenage girls. This study will use data already collected by the University of California, San Diego, and the California Department of Health Service. The two data sources were the California Tobacco Surveys (CTS) 1990-1991, 1992, 1993, and 1996, and the California Youth Tobacco Survey (CYTS) 1994-1997. The sample will be comprised of female adolescents with the following

self-identified ethnicities: African-American, Asian, Hispanic, and White (total N = 13,250). Both conventional and advanced statistical approaches will be employed to study ethnic differences in media exposure and cigarette smoking. The findings in this study will enable the health professionals to design more successful tobacco use prevention programs to reduce media influences on female adolescents.

**Title:** Telephone Counseling for Pregnant Smokers

**Principal Investigator:** Zhu, Shu-hong

**Institution:** University of California, San Diego, CA

**Funding Agency:** California Tobacco-Related Disease Research Program

**Project ID:** 8RT-0103

**Project Funding Period:** 1 July 1999 – 30 June 2002

**Abstract:** Maternal smoking during pregnancy or shortly after childbirth has serious health consequences for the fetus or the developing infant. It is associated with an increased risk for spontaneous abortion, pregnancy complications, premature delivery, low birth weight, and prenatal and neonatal death. The increased risk can be reversed or minimized if women stop smoking soon after they become pregnant. However, it is estimated that 15% of pregnant women in the United States smoke cigarettes. Furthermore, of those who successfully quit during their pregnancy, 70% relapse soon after their baby is born. Thus, there is a pressing need to develop programs that can help these women quit smoking during pregnancy and prevent them from relapsing after childbirth. Unfortunately, few pregnant women have access to a suitable program, one designed to account for their distinctive circumstances and needs. Quitting smoking is difficult at any point in time, but stresses unique to pregnancy and to the postpartum period make it even more challenging for the women. This study will test the effectiveness of a telephone counseling helpline specifically designed for pregnant women. The counseling will be provided over the phone so that the pregnant women need not leave home to receive the help. The counseling will be tailored to individual needs as each woman will be assigned to a specific counselor who will work with her individually to come up with a quitting plan that suits her personally. The counselor will provide counseling over the phone to assist her to stop smoking (or to stay quit) throughout the pregnancy, and offer counseling and support up to six months postpartum. This study will recruit participants through the Partnership for Smokefree Families (PSF), a collaboration of three large and integrated health care systems in San Diego, which provide health care for about 20,000 pregnant women each year. It is estimated that about 80% of these pregnant women see their doctor during the first trimester for prenatal care. This provides a prime opportunity to intervene with this population. Physicians can ask their pregnant patients if they smoke. If they do, physicians can advise them to quit, provide written self-help materials, and refer them to the telephone counseling helpline (known as the PSF Helpline). The referral consists of two elements: 1) The smokers will be encouraged to call the helpline; 2) permission to have a counselor call them at home will also be requested. This study will use a proactive calling procedure to enroll these pregnant smokers into counseling if they fail to call the helpline after their visit with the physicians. The physicians can also provide support and a degree of accountability for pregnant smokers by asking about their smoking status at subsequent prenatal visits. As physicians may not have the time or training to offer smoking cessation counseling, the prenatal visit will be used as a springboard to enroll smokers into more extensive assistance, in this case the telephone counseling helpline. This would allow pregnant women to get the attention they need and would minimize the time drain on physicians. This study is designed to: 1) Determine how often pregnant smokers will call a free helpline for counseling after they are advised to do so in their first prenatal visit. 2) Determine how many pregnant smokers will participate in counseling if contacted proactively. 3) Test if telephone counseling can help pregnant smokers quit smoking and stay abstinent after the baby is born. This will be accomplished with a randomized design. Determine if quitting as

a result of doctors' advice and/or telephone counseling increases birth weights of babies born to participating women.

**Activity Type:** Listserv

**Title:** Girl-Talk

**Sponsor:** Campaign for Tobacco Free Kids

**Date:** October 2002 (Launched)

**Description/Agenda:** Girl-Talk is a new listserv sponsored by the Campaign for Tobacco Free Kids (with support from the National Tobacco Control Training and Technical Assistance Consortium -- TTAC), which provides a forum to discuss issues surrounding women, girls and tobacco. The primary goal of the listserv is to provide a mechanism for organizations working on, or interested in working on, women, girls and smoking to communicate with each other and share ideas, resources and strategies with the aims of moving the issue higher on the agendas of the organizations involved and increasing the numbers of groups working on the issue. The listserv aims to facilitate an exchange of ideas between national and state groups and between tobacco control/public health groups and groups whose constituencies are women and girls.

In developing the initial list of participants for the listserv, we were diligent to include representatives of both state and local organizations and from tobacco control, women's, girls, health, policy, education, nursing, medical and government groups. We worked to ensure include representatives of communities of color and the LGTB community.

Girl-Talk was launched in October of 2002 and has over 50 members. We hope to carefully build the list of members to no more than 200 over the next year.

**Activity Type:** Media Campaign

**Title:** Great Start

**Sponsor:** American Legacy Foundation

**Date:** December 4, 2001 (Launched)

**Description/Agenda:** (Press Release) The American Legacy Foundation announced today the launch of its "Great Start" campaign to help the hundreds of thousands of women who smoke during their pregnancy to quit. Great Start is the first national campaign of its kind in the United States. The campaign includes: The first national telephone "Quitline" offering pregnant smokers free counseling sessions. Quitline operations, managed by the American Cancer Society, are available 24 hours a day, beginning today. The toll-free number to call is 1-866-66-START. A national television advertising campaign in all 50 states and the District of Columbia. Utah First Lady Jacalyn S. Leavitt and the wives of governors of 15 other states appear in ads that run in their home states. "About 426,000 women smoke during pregnancy each year in America," said Dr. Cheryl Healton, Legacy president and CEO. "That includes 13 percent of all pregnant women, and 18 percent of pregnant young women aged 15-19. We know that many of these expectant mothers want to stop smoking and would stop if they received assistance. We hope that Great Start will provide tens of thousands of women with the help they need to quit smoking during their pregnancy, and quit for good." American Cancer Society Chief Executive Officer John R. Seffrin, Ph.D., said, "The American Cancer Society takes care of more than a million telephone callers annually. We are the only organization in the nation with the capacity and the capably trained smoking cessation counseling resources to support Great Start. We are delighted to support our colleagues in the American Legacy Foundation in this important new campaign to positively influence the health of these expectant mothers and their babies." Healton said that smoking during or after pregnancy has been linked to one in 10 infant deaths. Smoking dramatically increases the risk for a wide range of reproductive health

problems including miscarriage, stillbirth, and premature delivery. Women who smoke are also nearly 70 percent more likely to have a low birth weight baby. Smoking during pregnancy, or smoking by a mother or father around babies or young children (secondhand smoke exposure), can cause common children's health problems including asthma, pneumonia, bronchitis, hearing problems, and learning and behavioral problems. Smoking also causes about 1,000 cases of sudden infant death syndrome each year nationwide. "The U. S. ranks 26th in the world in infant mortality," Healton said. "Effective smoking cessation programs for pregnant women can help save many children." Starting today, pregnant smokers can call the toll-free Great Start Quitline to receive telephone counseling sessions with a counselor who is specially trained to help pregnant smokers quit. Spanish-language counseling is also available. Healton said, "The Quitline allows any expectant mother who smokes, anywhere in America, to get help quitting just by reaching for a telephone." Great Start has the support of a coalition of women state leaders organized and led by Utah First Lady Jacalyn S. Leavitt. The coalition includes representatives from the following states: Alaska, Arkansas, California, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Michigan, Montana, Ohio, Oklahoma, Tennessee, Texas, and Washington. "The Great Start campaign is vitally important," Mrs. Leavitt said. "It will bring new visibility to a serious health problem that hasn't received the attention it deserves. We believe we can motivate pregnant women to take the first step toward a healthier family." The television ads deliver the inspiring message that smokers can make a difference in their health and the health of their babies if they quit smoking, and encourage pregnant women to call the toll-free Quitline for assistance. The national television campaign in all 50 states and the District of Columbia begins on Dec. 18. Ads begin running today in the states which are part of the coalition.

**Activity Type:** Media Campaign

**Title:** The National Partnership to Help Pregnant Smokers Quit

**Sponsor:** Smoke-Free Families

**Date:** April 25, 2002

**Description/Agenda:** (Press Release) In response to alarming rates of smoking during pregnancy, 40 groups are joining together to form The National Partnership to Help Pregnant Smokers Quit. The cornerstone of the National Partnership's efforts is a brief, easy-to-implement five-to-15-minute counseling approach which has been shown to dramatically affect quit rates, doubling, or even tripling them among pregnant smokers compared to simply advising them to quit. Making this counseling available to all pregnant women who smoke is one of the top aims of the National Partnership.

"Quitting smoking is the most important thing a pregnant woman can do to improve both her health and the health of her unborn child," said Cathy Melvin, Ph.D., M.P.H., National Partnership chair and director of the Smoke-Free Families: National Dissemination Office.

"Smoking cessation programs for pregnant women could prevent several thousand low-birth-weight births and save at least 1,000 lives each year," said James S. Marks, M.D., M.P.H., Director of the National Center for Chronic Disease Prevention and Health Promotion at the Centers for Disease Control and Prevention. "This could more than double the overall cost savings attributed to the rest of prenatal care."

An estimated 20 percent of women smoke during pregnancy, causing 20 percent of all low-birth-weight births. This accounts for ten percent of all infant deaths in the United States each year -- approximately 1,000 babies.

“This new intervention tells us what to say, what kinds of materials to offer, and how to use the time we were already investing with our patients for best results. We can now intervene with more skill and confidence,” said Sharon Phelan, M.D., of the American College of Obstetricians and Gynecologists.

The National Partnership will develop a public service advertising and communications campaign to increase pregnant smokers’ knowledge of cessation resources, and to illustrate how pregnant smokers’ partners, family members, and friends can support and encourage them during their quit attempts. As a first step, the National Partnership has developed a Mother’s Day electronic card that friends and family members can send to show their support for someone they care about who is pregnant and trying to quit smoking. The card will be available at [www.smokefreefamilies.org](http://www.smokefreefamilies.org) by April 30.

“Changing behavior means that we need to help providers deliver effective services, and we also need to make sure people know they are available,” noted C. Tracy Orleans, Ph.D., Senior Scientist at The Robert Wood Johnson Foundation. We plan to work with both national and local media to help pregnant smokers learn where to get the help they need. At the grassroots level, the National Partnership will work with communities and worksites to address the issue of smoking during pregnancy, support the development of local cessation resources and encourage employers to provide insurance coverage for smoking cessation services.

In addition, the National Partnership will promote economic and other policy interventions that prevent and reduce maternal smoking, including improved coverage of cessation services. For example, only 13 states provide Medicaid coverage for cessation counseling for pregnant smokers, despite the fact that Medicaid is the primary health coverage for between one quarter and one half of all pregnant women.

The success and impact of the National Partnership’s work relies on up-to-date and accurate research, evaluation, and surveillance programs. Members of the National Partnership will coordinate research efforts to determine how to improve best-practice interventions, and to identify ways to strengthen surveillance of smoking during pregnancy to effectively track the problem and refine ways to treat it.

“One of the questions we face is basic: how many pregnant smokers are there? Because some women may be reluctant to admit that they smoke, and because of disparities between state reporting processes, it’s not a simple question to answer,” said Dr. Melvin, “Developing a standard reporting process so that we gather better data is just one of the steps we need to take to increase our knowledge and develop better interventions.”

She continued, “The National Partnership believes that every pregnant smoker who wants to quit should have access to effective cessation services. Together, our actions will create a supportive network for pregnant women during their quit attempts, to help them quit successfully, and to create a smoke-free future for their babies and future generations.”

The National Partnership to Help Pregnant Smokers Quit is coordinated by Smoke-Free Families, based at the Cecil G. Sheps Center for Health Services Research at the University of North Carolina at Chapel Hill, a program funded by The Robert Wood Johnson Foundation. For more information about the National Partnership, visit the Smoke-Free Families web site at [www.smokefreefamilies.org](http://www.smokefreefamilies.org).

**Activity Type:** Meeting

**Title:** Annual Investigator Meeting 2002. Women and Smoking: Smoking Has No Glass Ceiling

**Sponsor:** California Tobacco-Related Disease Research Program

**Date:** December 4-5, 2002

**Description/Agenda:** (Information from Program) TRDRP focuses its 7th Annual Investigator Meeting on the theme of Women and Smoking to address what the U.S. Surgeon General describes as "an epidemic of tobacco-related diseases" for women. AIM's plenary session will examine: Tobacco industry marketing aimed at women, health effects of tobacco use for women, sex and gender differences in tobacco-related disease mechanisms, and prevention and cessation strategies for women and girls. The conference will also include workshops on tobacco use and women's health and a Town Hall meeting exploring the issue of harm reduction. On Wednesday evening, a reception will be held at the nearby San Jose Art Museum. The conference will conclude with "TRDRP Listens"-an opportunity to tell us your views on TRDRP's research priorities and mission.

Poster sessions included: Cardio, Pulmonary & Other Tobacco-Related Diseases; Environmental Tobacco Smoke; Youth Cigarette Smoking; Economics & Policy; Novel Cessation Approaches; Women & Smoking; Smoking in Multiethnic Populations; Nicotine Receptors & Addiction; Lung Cancer; and Genetic Epidemiology.

Workshops included: Smoking and Breast Cancer, Cardiovascular Disease in Women, TCS Data on Women and Smoking in California, Tobacco Use Research Centers Panel Discussion, Cutting Edge Issues in COPD, and ETS and Adverse Pregnancy Outcomes.

**Activity Type:** Website

**Title:** International Network of Women Against Tobacco (<http://www.inwat.org>)

**Sponsor:** International Network of Women Against Tobacco

**Date:** Not available

**Description/Agenda:** (Home Page Description) The International Network of Women Against Tobacco (INWAT) was founded in 1990 by women tobacco control leaders to address the complex issues of tobacco use among women and young girls.

INWAT

- Provides contacts, primarily women, to individuals and organizations working in tobacco control.
- Collects and distributes information regarding global women and tobacco issues.
- Shares strategies to counter tobacco advertising and promotion.
- Supports the development of women-centered tobacco use prevention and cessation programs.
- Assists in the organization and planning of conferences on tobacco control.
- Collaborates on the development of publications regarding women and tobacco issues.
- Promotes female leadership.

The website includes links to Women and Smoking: A Report of the Surgeon General 2001; the WHO Report on Women and Smoking; the INWAT Europe: Current Awareness Bulletin; Filtered Policy - Women and Tobacco in Canada; and Femmes and Tabac. Links to fact sheets on women and smoking from Australia, Canada, England, Scotland, Thailand, and the USA are also listed.